

ABSTRACT

A distributed computer system having a server and remote client for executing an application on the server. A remote-capable user interface toolkit resides on the server and has remote-capable components that correspond to components of a user interface toolkit which resides on the remote client. The remote-capable components are substantially the same as corresponding components of the user interface toolkit, and interact with the application according to the same application programming interface. However, when invoked by the application, the remote-capable components issue a message to the component on the remote client to perform the corresponding function on the client. A network communication protocol of sending messages between the remote-capable user interface toolkit on the server and the user interface toolkit on the client is thereby generated. The remote-capable components may be created by a code-generating routine which reads in the component of the user interface toolkit, copies the code of the component, and substitutes a portion of the code relevant to performing the function of the component with a portion of code that issues a remote message to a component on a remote client to perform the same function.